

JAN-09-06 12:10PM FROM-Fenwick & West CTR#59

415 281 1350

T-318 P.002/013 F-307

Best Available Copy

QuickBase®
Multi-Process System Architecture

December 20, 2001

Jim Salem

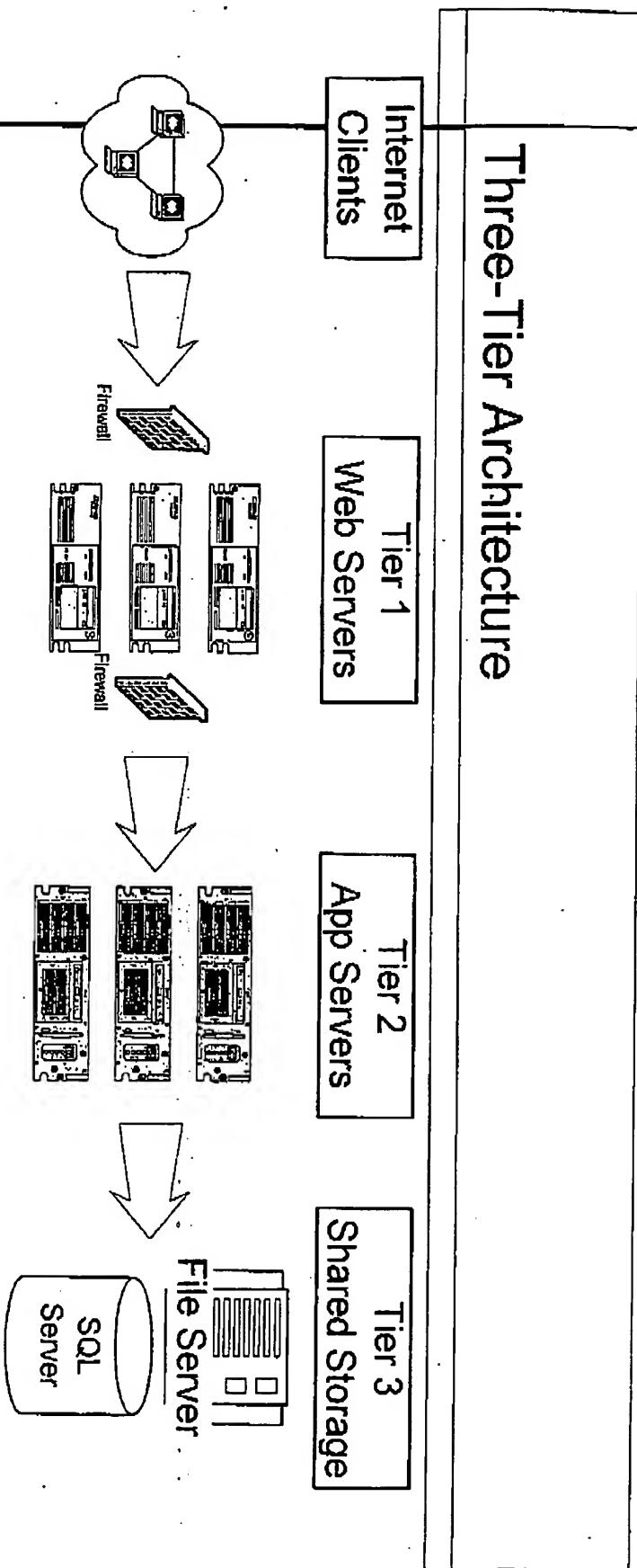
Copyright 2002, Intuit Corporation – Proprietary and Confidential

Intuit®

Goals

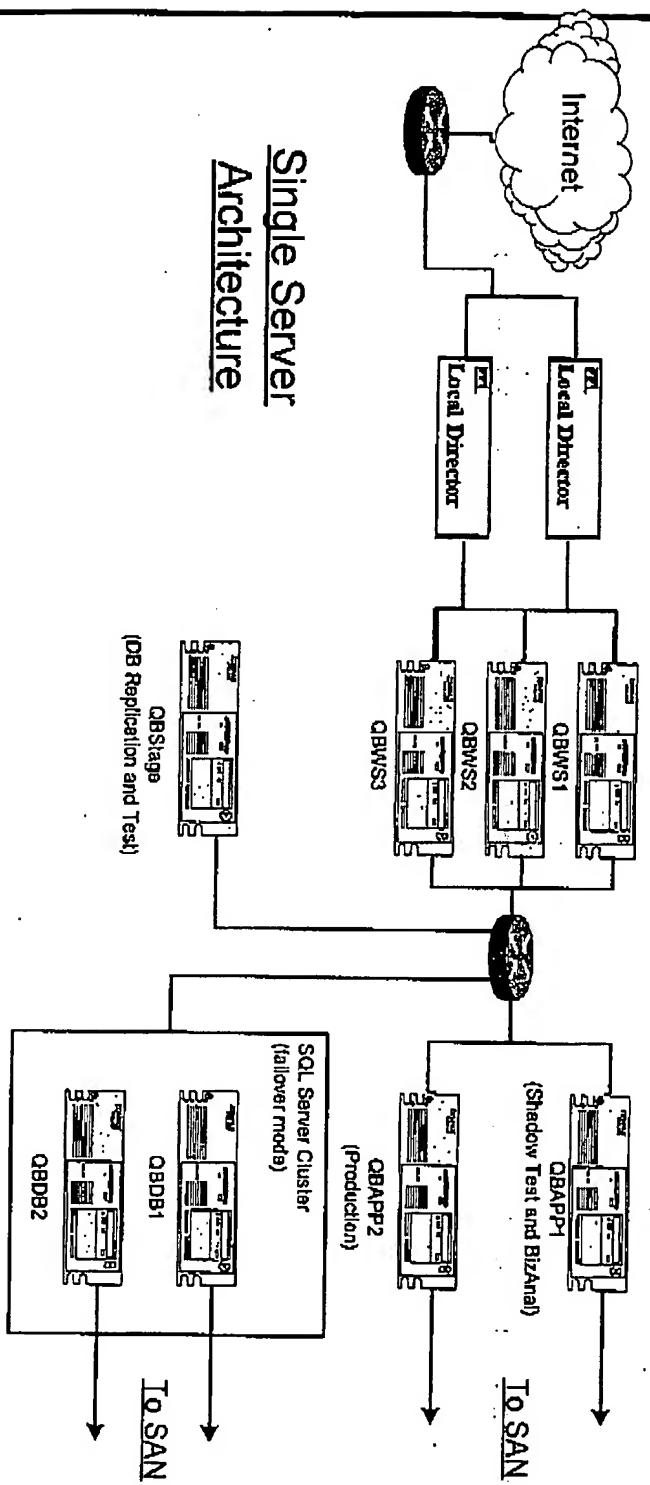
- Single Machine Scalability – at least 5x over current levels
- Multiple Machine Scalability – 100x over current levels
 - 600 transactions/second
 - 500K users per day
 - 500K different DBs per day
- Security
- Easy to Manage
- Support Rapid Development
 - Simple Deployment
 - Shadow Testing

Three-Tier Architecture



<u>Role</u>	Buffers Requests SSL Encryption Static Content	DB Transactions UI Generation	DB Backing Store System Data
<u>Machine Types</u>	Simple servers Non-redundant	Fast servers Redundant	Clustered Fast servers RAID 5
<u>Process Type</u>	Stateless	Loaded DBs assigned to one server	Multi-threaded with locking

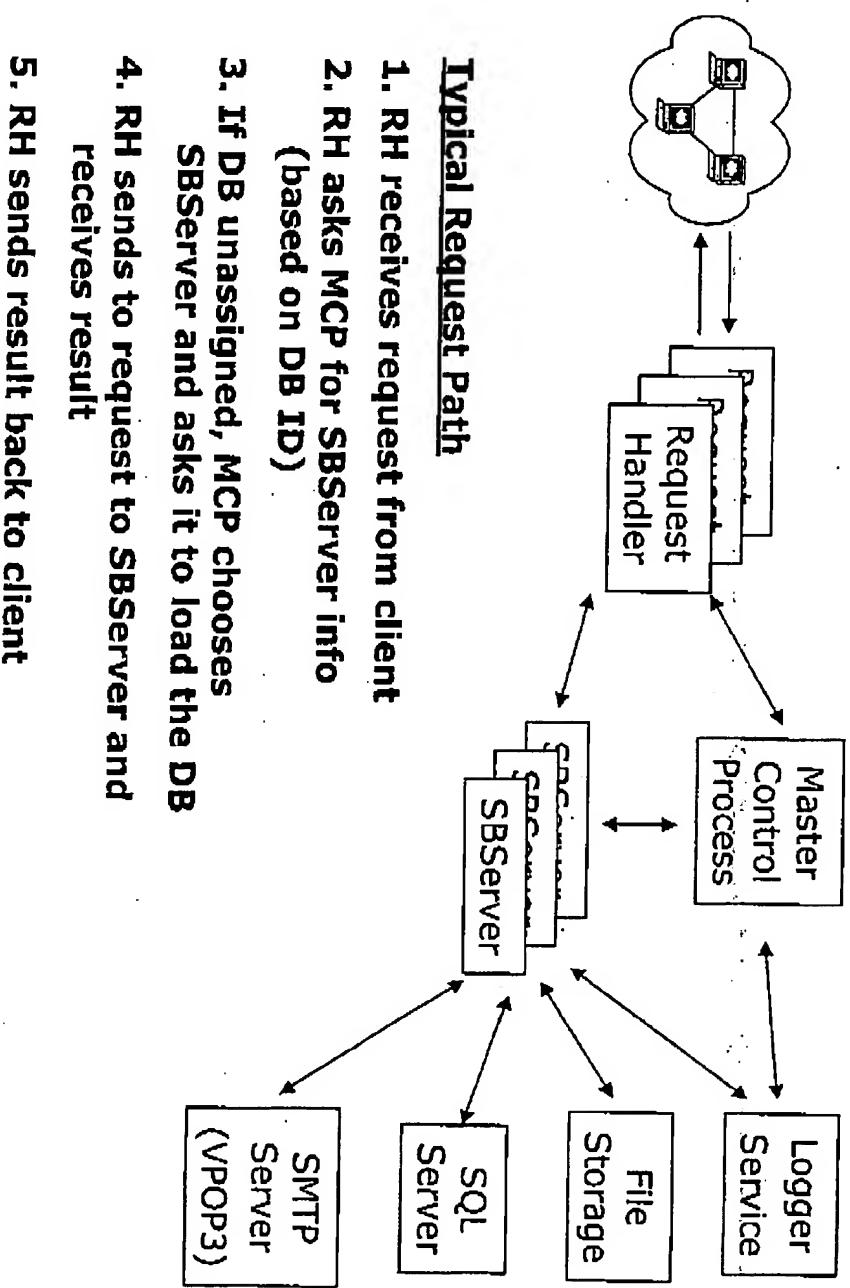
Hardware Diagram (Current)



Copyright 2002, Intuit Corporation – Proprietary and Confidential

Intuit

Process Architecture



Request Handler Processes

- Runs on Web Server machines (tier 1)
- Buffers request and response between SBServers and client machines
- Displays "Server Unavailable" page if SBServer unavailable
- Web Server (IIS) manages these processes
- Two types (currently)
 - Normal (aka CGI)
 - File Download (aka |SAPI|)
- Proposed additional types (future)
 - File Upload
 - XSL Transform
 - MSWord Doc merge

Master Control Process

- Runs on Application Server (tier 2)
- Assigns DBs to SBservers
- Tells RHs which SBSERVER to use
- Assigns unique DB IDs
- There is a single, multi-threaded MCP

SBSERVER PROCESSES

- Runs on Application Server Machine (tier 2)
- Handles requests
 - Main requests
 - E.G., User profile changes, My QuickBase
 - DB requests
 - E.G., Views, Add Record
 - Layers
 - UI
 - DB engine

SQL Server

- Runs on DB Server Machine (tier 3)
- Stores shared information
 - DB names, ACLs, etc.
 - User information
 - Statistics
- MS SQLServer 2000
- Multi-threaded

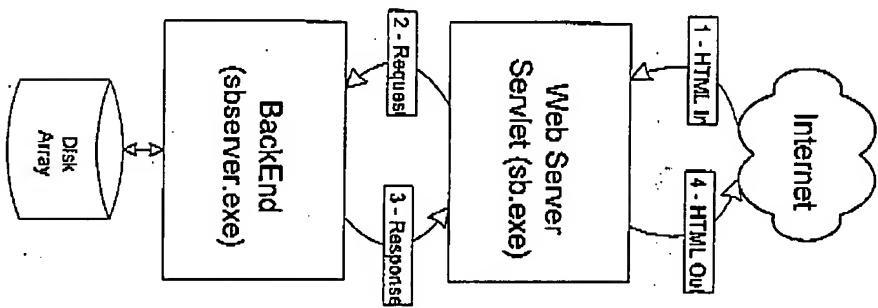
10

File Storage

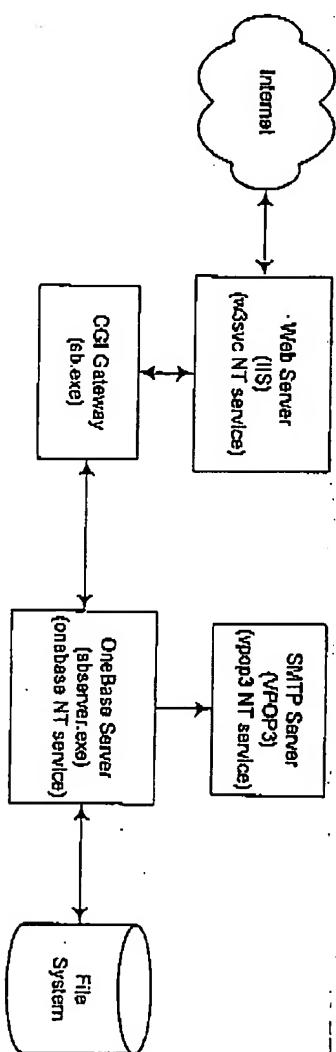
- Runs on Storage Area Network (tier 3)
- Uses Compaq StorageWorks
- Future: Dedicated File Server

11

Old Single Process Architecture – Request Flow



Old Single Process Architecture – Processes



Copyright 2002, Intuit Corporation – Proprietary and Confidential

Intuit

D
5-
=**FENWICK & WEST LLP**

EMBARCADERO CENTER WEST | 275 BATTERY STREET | SAN FRANCISCO, CA 94111

TEL 415.875.2300 | FAX 415.281.1350 | WWW.FENWICK.COM

FACSIMILE TRANSMISSION**CONFIDENTIAL****DATE:** January 9, 2006**CLIENT-MATTER NUMBER:** 16319-05906**To:**

NAME:	FAX No.:	PHONE No.:
Examiner Luke S. Wassum USPTO	571-273-4119	571-272-4119

FROM: Daniel R. Brownstone **PHONE:** (415) 875-2358**Re:** Application 10/081,525

NUMBER OF PAGES WITH COVER PAGE: 13

MESSAGE:

Please find attached a copy of Exhibit A to the November 7, 2005 declaration of James Salem.

CAUTION - CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS FACSIMILE MESSAGE IS PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE OR ITS DESIGNEE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPY OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

**IF YOU DO NOT RECEIVE ALL OF THE PAGES, OR IF THEY ARE NOT CLEAR,
PLEASE CALL COPY & FAX SERVICES AT (415) 875-2381
AS SOON AS POSSIBLE.**

16319/05906/SF/5158841.1

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.